

REMARKS

Claims 1-9 and 11-50 are now pending in the Application, with claims 1, 24 and 25 being the independent claims. Reconsideration and further examination are respectfully requested.

In the Office Action, claims 1-23, 26 and 27 were rejected under 35 U.S.C. §101 as allegedly being directed to non-statutory subject matter.

In response, independent claim 1 has been amended above to recite a practical application of the claimed grouping technique. More specifically, independent claim 1 now recites the additional practical step of purchasing or selling an asset based on an assessment of: (i) how statistics for at least one of the formed groups vary over time; or (ii) how one asset in one of the formed groups compares to other assets in the same group. Support for this amendment is found, for example, on page 28 from line 6 to line 27 and on page 29 from line 18 to line 25 of the Specification. MPEP §2107.01 states that:

“practical utility is a shorthand way of attributing ‘real-world’ value to claimed subject matter. In other words, one skilled in the art can use a claimed discovery in a manner which provides some immediate benefit to the public.” [Citation omitted].

The present invention’s provision of improved techniques for sectorization can allow better decisions to be made regarding whether or not to buy or sell an asset, in much the same way that the *Signature Financial* patentee’s calculation of a share price for making investment decisions was held to constitute statutory subject matter. For these reasons, withdrawal of the §101 rejection is respectfully requested.

In the Office Action, claims 1, 3, 4, 7-9, 11-13, 16-18, 20, 24, 25, 26 and 27 were rejected under 35 U.S.C. 103(a) over U.S. Patent 6,125,355 (Bekaert) in view of the definition of "regression analysis" in Barrons Dictionary of Finance and Investment (Barrons) and in view of the taking of official notice; claim 2 was rejected under §103(a) over Bekaert in view of Barrons, the taking of the previous official notice and the taking of additional official notice; claims 5, 6, 19 and 21-23 were rejected under §103(a) over Bekaert in view of Barrons, the taking of the previous official notice and U.S. Patent 6,473,084 (Phillips); claim 10 was rejected under §103(a) over Bekaert in view of Barrons, the taking of the previous official notice and U.S. Patent 6,018,722 (Ray); and claims 14 and 15 were rejected under §103(a) over Bekaert in view of Barrons, the taking of the previous official notice and the taking of additional official notice.

Withdrawal of these rejections is respectfully requested for the following reasons.

The present invention concerns techniques for grouping assets into different sectors based on similarities in the assets' measures of tendency to change in value as a result of changes in data values for different exogenous variables (e.g., based on similarities in the assets' price sensitivities or elasticities). This technique for sectorizing assets is believed to be a significant improvement over conventional techniques in which assets are assigned to sectors on an *ad hoc* basis, e.g., based on similarities in the underlying companies' general areas of business. As discussed more fully in the Specification, uses of sectoral statistics in arriving at buy/sell decisions is well-documented in the prior art. The substitution of the sectorization technique of the present invention for conventional sectorization techniques, by creating better sectors,

makes the resulting conventional sectoral data more useful and provides the opportunity for using additional sectoral statistics in making such buy/sell decisions.

In this regard, independent claims 1, 24, and 25 are directed to systems, methods, and techniques for classifying assets into business sectors. Initially, for each of plural exogenous variables, a measure of a tendency for a value of an asset to change as a result of a change in a data value for such exogenous variable is calculated. Such a calculation is repeated for each of plural different assets. Then, the plural different assets are grouped in plural different sectors based on similarities of the measures of the tendency to change.

The foregoing combination of features is not disclosed or suggested by the applied art. In particular, the applied art does not disclose or suggest at least the feature of grouping plural different assets into plural different sectors based on similarities in measures of a tendency to change value based on changes in data values of plural exogenous variables (e.g., based on similarities in price sensitivities or elasticities).

In this regard, the Office Action cites Bekaert as showing the classification of assets into business sectors by processing historical data values for plural exogenous variables to obtain a price formula for each asset. However, Bekaert has been studied in particular detail and is not seen to say anything at all about classifying assets into sectors. Rather, Bekaert only seems to be concerned with determining a projected future value for certain assets based on input economic factors. See, e.g., column 1, lines 18-20 of Bekaert. The portions of Bekaert specifically mentioned in the Office

Action, as well as the remainder of Bekaert, have been carefully examined and are not seen to say anything at all about sectorization of assets. In fact, sectors do not even appear to be mentioned in Bekaert.

The Office Action acknowledges that Bekaert fails to disclose the calculation, for each of plural exogenous variables, of a measure of a tendency of a value of an asset to change as a result of a change in a data value for the exogenous variable. However, the Office Action cites Barrons in order to make up for this deficiency and then asserts that it would have been obvious to combine Barrons' teaching with that of Bekaert in order to obtain the above-referenced combination of features. In response, it is noted that Barrons merely discusses regression analysis as a general concept. There is no indication either in Barrons or Bekaert how conventional regression analysis may be utilized in Bekaert's pricing module in any way that would have achieved the present invention. This particularly is the case as neither Bekaert nor Barrons even mentions sectorization.

The Office Action also takes official notice of the concept and benefits of grouping stocks, securities and/or assets into sectors and based upon similarities, such as putting chemical companies in a chemical sector, financial companies in a financial sector, etc. Applicants agree that this description characterizes the conventional technique for sectorization and that sectorization has practical value. However, the Office Action also takes official notice that it is known to classify companies depending upon their total value of assets, geographical location, volatility characteristics like data,

and so on. Applicants are not aware of any sectorization techniques which rely upon such factors. In this regard, MPEP §2144.03 states,

"It would not be appropriate for the examiner to take official notice of facts without citing a prior art reference where the facts asserted to be well known are not capable of instant and unquestionable demonstration as being well-known. For example, assertions of technical facts in the areas of esoteric technology or specific knowledge of the prior art must always be supported by citation to some reference work recognized as standard in the pertinent art."

In the present case, the information relied upon in the Office Action, clearly is not capable of instant and unquestionable demonstration as being well-known in the art. Accordingly, Applicants request the citation of a reference in support of this assertion, as is required by MPEP §2144.03.

For the reasons set forth above, it is believed that several features of the present invention are absent from the prior art. Accordingly, an obviousness rejection is believed to be inappropriate. In this regard, MPEP § 2142 requires that in order to establish a *prima facie* case of obviousness, the Examiner must cite prior art references that teach or suggest all of the claim limitations, and if more than one such reference is required to disclose all such limitations, that there be some suggestion or motivation to combine the referenced teachings. As noted, all of the claim limitations are not present in the applied art.

Similarly, it is not believed that there would have been any motivation to combine the prior art references applied in the Office Action, in any manner whatsoever, much less in any manner that would have provided the above-referenced combination of features. More specifically, Bekaert only appears to concern asset pricing, Barrons only

generally describes regression analysis, and the information of which official notice is taken is the conventional business-description-based technique for sectorization which is significantly different than the sectorization technique of the present invention. All three references are significantly different from each other, and none of such references provides the required motivation to combine the teachings of such disparate references. In fact, the only motivation asserted in the Office Action to combine such references appears to be based on Applicant's own disclosure, which of course is an impermissible basis for combining references. In this regard, the Federal Circuit has held as follows:

"This factual question of motivation is material to patentability, and could not be resolved on subjective belief and unknown authority. It is improper, in determining whether a person of ordinary skill would have been led to this combination of references, simply to "[use] that which the inventor taught against its teacher." [citation omitted]

In re Lee, 277 F.3d 1338, 1343-44 (2002)

"In its decision on [the subject] patent application, the Board rejected the need for "any specific hint or suggestion in a particular reference" to support the combination of the [applied art] references. 'Omission of a relevant factor required by precedent is both legal error and arbitrary agency action.'"

Id. at 1344.

In short, it is believed that the prior art teaches neither (i) all of the limitations recited in the independent claims discussed above nor (ii) any motivation to combine the applied references as in the instant rejection. For these reasons, independent claims 1, 24, and 25 are believed to be allowable over the applied art.

The other claims in the Application depend from these independent claims and are therefore believed to be allowable for at least the same reasons. In addition, each

such dependent claim recites an additional feature of the invention that further distinguishes the invention from the applied art. Accordingly, the individual consideration/reconsideration of each on its own merits is respectfully requested.

In addition, claims 5, 6, 19 and 21 to 23 have been rejected based upon Phillips. However, Phillips has the same inventors as the present application and was not published or issued more than one year prior to the filing date of the present application. Accordingly, Phillips is not believed to be valid prior art against the present application. For this additional reason, claims 5, 6, 19 and 21 to 23 are believed to be allowable over the applied art.

In view of the foregoing amendments and remarks, the entire Application is believed to be in condition for allowance, and an indication to that effect is respectfully requested.

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Respectfully submitted,

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